Geographic Review Panel 3 – American River/Eastside Tribs

Proposal number: 2001-F203 **Short Proposal Title:** Tertiary and Quaternary Wastewater Treatment for Water Quality Restoration within the Bay-Delta.

1. Applicability to CALFED ERP Goals and Implementation Plan and CVPIA priorities, and relevance to ERP and CVPIA priorities for your region. The main potential benefit of this project is the possibility that it could lead to faster or more widespread implementation of advanced sewage treatment technology throughout the Bay-Delta watershed (because it may be cheaper than existing advanced treatment technology). Potential benefits specifically for the lower San Joaquin River would be less certain, especially with respect to the dissolved oxygen issue in the ship channel, because previous studies indicate that this problem is due mostly to decomposition of algal biomass produced upstream of the Stockton wastewater effluent location and subsequently transported into the ship channel (rather than to oxidation of ammonia effluent).

2. Linkages/coordination with previously funded projects or other restoration activities in your region. Weak, see response to 1 above and Staff review comments.

3. Feasibility, especially the project's ability to move forward in a timely and successful manner. Project seems feasible.

4. Qualifications of the applicants and others involved in implementing the proposed project. Project team seems well qualified.

5. Local involvement (including environmental compliance). City of Stockton involvement.

6. Cost. Reasonable.

7. Cost sharing. Some inkind support, less than 10% of project cost.

8. Additional comments. Specifically with respect to dissolved oxygen issue in the ship channel, a detailed study of the City of Stockton's existing pond system and how its performance (especially during the fall and early winter months) might be worth pursuing in addition to or prior to the proposed project.

Regional Ranking

Panel Ranking: Low.

Provide a brief explanation of your ranking: The main potential benefit of this project is the possibility that it could lead to faster or more widespread implementation of advanced sewage treatment technology throughout the Bay-Delta watershed (because it may be cheaper than existing advanced treatment technology). Potential benefits specifically for the lower San Joaquin River would be less certain, especially with respect to the dissolved oxygen issue in the ship channel, because previous studies indicate that this problem is due mostly to decomposition of algal biomass produced upstream of the Stockton wastewater effluent location and subsequently transported into the ship channel (rather than to oxidation of ammonia effluent). Advanced treatment would reduce ammonia loading to the ship channel and thus reduce exposure to toxic undissociated ammonia (depending on pH), but the City of Stockton will undoubtedly have to reduce this loading under its NPDES permit anyway. This project would simply offer the City the hope of a cheaper way to perform this legally required

upgrade to its wastewater treatment facilities. From an ecosystem restoration viewpoint, this project thus has a low ranking for this geographic region.